

GDP in Somaliland

A Preliminary Estimate for 2012

Documentation of Sources and methods

January 14, 2014

Jan Redeby

jan@redeby.co.ls

Table of contents

List of Acronyms	1
1 Introduction.....	2
2 GDP 2012.....	2
2.1 GDP by Activity	2
2.2 GDP by Expenditure	11
3 The Business Survey.....	12
4 The Somaliland Household Survey	14
Appendix 1 GDP by Activity 2012.....	16

List of Acronyms

CSD	Central Statistics Department of the MNPD
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
ISIC	International Standard Industrial Classification of All Economic Activities
LMIS	Livestock Management Information System
PREM	Poverty Reduction and Economic Management
SBS	Somaliland Business Survey
SHS	Somaliland Household Survey
SIF	Somaliland in Figures
SLS	Somaliland Shillings
UNDP	United Nations Development Programme
USD	United States Dollar

1 Introduction

The Minister of National Planning and Development has requested that the World Bank provide assistance in strengthening the ability to determine and monitor macroeconomic data. Accordingly, the World Bank Poverty Reduction and Economic Management (PREM) Somalia programme has hired a consultant to assist in developing estimates of GDP and to deal with related issues in economic statistics. Three missions have been carried out, in January, April/May and September 2013.

The September mission concluded that the priority should be to get an estimate of the size of the economy. In practical terms this means an estimate of GDP by activity – the production approach – for 2012. As suggested in the report of September, the consultant has now prepared an estimate of GDP by activity for 2012. On the expenditure side, it has been possible to calculate final consumption expenditure by households and government. Indicative guesses have been added for gross fixed capital formation and exports; the intention is to give an approximate idea of the magnitude of imports. The results and the sources and methods are discussed in Section 2 of the report.

Two surveys were carried out in the first half of 2013 providing crucial data for calculating GDP for 2012.

- The results of the *Somaliland Business Survey* (SBS) were made available to the mission in September and analysed and prepared for use in the national accounts as described in Section 3 of the report.
- The data processing and analysis of the *Somaliland Household Survey* (SHS) were completed after the mission in September and were subsequently prepared and analysed by the consultant for use in the national accounts. This is described in Section 4 of the report.

2 GDP 2012

2.1 GDP by Activity

Appendix 1 presents the compilation of GDP by activity for 2012. It is a desk product and should be seen as preliminary; it could and should be modified after scrutiny by stakeholders and emergence of additional evidence. It has, for example, not been possible to properly include activities funded by donor aid. About USD 60 million were disbursed in 2012 and could add 2-3% to the level of GDP.

Appendix 1 also provides GDP by activity converted into USD. The official exchange rate is used which certainly underestimates the numbers compared to a PPP-adjusted rate. Table 2.1 shows total GDP and per capita.

Table 2.1: GDP and GDP per capita

Product	Values
Total GDP, SLS billion	8 991.0
GDP per capita, SLS thousand	2 248
Total GDP, USD million	1 390.9
GDP per capita, USD	348
Exchange rate SLS/USD	6 464

As discussed in Section 4 below there is no firm estimate of the total population, which is needed to raise the results of the SHS to national totals. The survey results have been raised assuming a population of 4 million. If the population instead is 3.5 million, total GDP would be about 5% lower.

The results and the sources and methods are described below, activity by activity. Because source data are scarce, evidence from other African countries – in particular Kenya – are used to estimate ratios such as intermediate consumption over output. The values are in billion SLS.

Growing of crops (ISIC A011)

Production account	Values	Sources
Output	921.9	Ministry of Agriculture for output of maize and sorghum
Intermediate consumption	184.4	Price data collected by the CBS;
Gross value added	737.5	SHS for output of vegetables, fruits and other products(based on consumption)
Contribution to GDP	8.2%	

The main crops in Somaliland are cereals with sorghum utilizing approximately 70% of the planted area and maize approximately 25%. Annual data on area planted and quantities harvested are provided by the Ministry of Agriculture. This is combined with price data collected by the CBS to calculate output;the prices are reduced with an estimated margin at 35% to derive producer prices.

Output of other products is estimated on the basis of consumption in SHS reduced by a margin at 35% and estimated import shares; a small addition is made for intermediate consumption in restaurants and exports.

Table 2.2: Output of crop farming

Product	Marketoutput	Own produce
Cereals	141.7	9.2
Grain mill products*		15.9
Beans, peas, lentils	32.2	
Vegetables	655.5	9.7
Fresh fruit	64.4	1.1
Total	921.9	35.9

* This is maize and sorghum flour processed on farm for own consumption

Intermediate consumption is estimated at 20% of output, based on Kenya's national accounts.

The livestock industry (ISIC A014, C101& C105)

Production account	Values	Sources
Output	3 561.3	LMIS database for export numbers and prices
Intermediate consumption	910.8	Municipalities for slaughtered animals
Gross value added	2 650.5	SHS for output of livestock products (meat for own consumption, milk, eggs, honey).
Contribution to GDP	29.5%	

Animal production (ISIC A014), processing of meat (abattoirs, ISIC C101) and of milk (ISIC 105) constitute the livestock industry and are calculated and published together. Also the traders in livestock are included in the livestock industry although, properly classified, they are part of wholesale trade (ISIC G46).

The major part of the output of animals is exports, about 85% of sales of livestock in 2012. The data source is the LMIS database, which provides prices and number of animals exported. Other sources – the Berbera Port Authority and prices collected by the CSD – are normally very close to the LMIS data. Numbers of animals for slaughter are collected from the municipalities. Output of the abattoirs (mainly meat but also hides and skins) is estimated on the basis of the values of input of slaughtered animals; an addition of 30% is made to take account for other inputs and value added.

Output of other products is estimated on the basis of consumption in the SHS reduced by a margin at 35% and estimated import shares; a small addition is made for intermediate consumption in restaurants and exports. Output values are shown in the table overleaf; the table also shows the input ratios, which are based on Kenya's national accounts.

Rearing of livestock constitutes production and changes in the numbers of animals – positive or negative – should be included in output as changes in inventories or gross fixed capital formation. However, there are no sources for estimating the changes in livestock herds.

Table 2.3: Output of the livestock industry

Product	Market output	Own produce
Animals for exports and slaughter	2 981.8	
Meat and meat products*	579.5	8.6
Milk	312.7	42.1
Eggs, honey and other products	11.5	0.1
Total	921.9	35.9

* Market output also includes hides and skins

Forestry (ISIC A03)

Production account	Values	Sources
Output	609.7	SBS: ratios in the production of resins
Intermediate consumption	145.7	SHS: output of charcoal and firewood based on consumption
Gross value added	464.0	Impact of Charcoal Production on Environment and the Socio Economy of Pastoral communities of Somaliland (case study 2004).
Contribution to GDP	5.2%	

Only four enterprises in the resins industry were included in the SBS, so the results are far below compared to what is produced by the resins industry. A tentative guess-timate is made for output, 200 billion SLS. The ratio of intermediate consumption is taken from the SBS.

In addition to resins, forestry includes charcoal, firewood as well as wood poles and thatching grass for construction; firewood is also collected for own consumption. The output estimates are based on the SHS: purchases of charcoal and firewood were recorded as well as the value of collected firewood. Ratios of intermediate consumption over output are based on the national accounts of Kenya and Uganda.

Table 2.4: Output of forestry

Product	Market output	Own produce
Charcoal	382.6	
Firewood	20.9	20.9
Wood poles and thatching grass	1.3	
Resins	200.0	
Total	588.8	20.9

Fishing (ISIC A03)

Production account	Values	Sources
Output	17.8	SBS: ratios in the production account
Intermediate consumption	2.7	SHS:total output (based on consumption)
Gross value added	15.2	
Contribution to GDP	0.2%	

The estimates are based on the results of the two surveys; output and intermediate consumption according to the SBS are raised with output calculated on the basis of household consumption in the SHS plus estimated exports.

Mining (ISIC B)

Production account	Values	Sources
Output	134.4	SBS
Intermediate consumption	13.4	
Gross value added	121.0	
Contribution to GDP	1.3%	

The SBS included 18 enterprises of which five reported extraction of metal ores. None of the respondents reported quarrying of stone and sand, although that certainly exists. Stone and sand are important inputs in construction and are estimated on the basis of imports of cement; there is a ratio of sand and aggregates to the use of cement.

Manufacturing excl. livestock products (ISIC C excl. C101 & C105))

Production account	Food & drinks	Other	Total	Sources
Output	403.3	221.0	624.2	SBS
Intermediate consumption	285.3	167.3	452.6	SHS State Print Agency
Gross value added	118.0	53.7	171.6	
Contribution to GDP	1.3%	0.5%	1.9%	

Separate estimates are made for Manufacture of food and beverages and Other manufacturing. The details are shown in Table 2.5 overleaf.

Output of *sorghum/maize flour* is derived by deducting consumption of cereals from output of cereals; this is assumed to be processed in mills. An addition is made for other inputs (5%) and value added (25%). *Milling fees* is derived from the SHS; intermediate consumption is assumed at 15%. Output of *bread* is derived from consumption of bread in the SHS. Intermediate consumption is estimated at 80% as in

Kenya's national accounts; the ratio according to the SBS is not realistic at less than 50%.

**Table 2.5a:
Output of food and beverages**

Product	Values
Sorghum/maize flour	123.8
Milling fees	35.8
Bread	181.3
Other food products	1.7
Beverages	60.6
Total	403.3

**Table 2.5b:
Output of other products**

Product	Values
Soaps and detergents	51.8
Metal products / work	56.8
Furniture	21.2
Other products	49.0
Addition based on SHS	40.0
State Print Agency	2.2
Total	221.0

Other food products and beverages are as estimated in the SBS, both output and intermediate consumption. Coca Cola recently established a plant in Somaliland which should have been included in the SBS but this needs to be checked; if not manufacture of beverages is underestimated.

The production accounts for *other manufacturing* are as recorded in the SBS with a tentative addition based on the enterprise module in the SHS. The income statement of the State Printing Agency is also included in the estimates.

Electricity supply (ISIC D)

Production account	Values	Sources
Output	446.7	Data from two electricity suppliers
Intermediate consumption	371.8	SBS: expenditure on electricity & one respondent SHS: household consumption of electricity
Gross value added	74.9	
/Contribution to GDP	0.8%	

Detailed data are available from two electricity suppliers, Somaliland Electricity Agency and Borama Power Station, as well as the response by one respondent to the SBS; this is covering only a fraction of all electricity suppliers. Output is set equal to the expenditure on electricity according to the SBS plus household consumption expenditure derived from the SHS. The income statements of SEA report huge losses, which have tentatively been treated as subsidies.

Water supply; sewerage; waste management (ISIC E)

Production account	Values	Sources
Output	45.8	Income statements from two municipalities and total water revenue from the rest
Intermediate consumption	31.5	
Gross value added	14.3	
Contribution to GDP	0.8%	

The estimates are based on detailed income statements from two municipalities and total revenue for the rest of them, assuming the same ratios. The SBS included two enterprises in waste management but they didn't provide any economic data except employment.

The SHS only recorded household expenditure on sewerage and not on water; sewerage is assumed to be included in the revenue of the water agencies. Besides, there are two other categories of water output consumed by households that are not included in the estimate:

- Water may be sold privately, e.g. by owners of berkads and boreholes.
- Water is collected by households for own consumption.

Construction (ISIC F)

Production account	Values	Sources
Output	716.0	SBS
Intermediate consumption	382.3	SHS: household purchases of building materials
Gross value added	333.7	
Contribution to GDP	3.7%	

The SBS included 43 enterprises (representing 148) of which 39 (representing 131) were active in construction of buildings and the remaining ones in civil engineering projects accounting for 80% and 20% of output respectively. The survey is taken to cover the formal construction enterprises. An addition is made for own construction by households based on household purchases of building materials.

Wholesale and retail trade; repair of motor vehicles (ISIC G)

Production account	Values	Sources
Output	3 083.2	SBS
Intermediate consumption	1 325.8	SHS for margins on household consumption
Gross value added	1 757.4	
Contribution to GDP	19.6%	

The trade industry (ISIC G) also includes repair and maintenance of motor vehicles. The SBS included 187 enterprises (representing 1938). As indicated in Section 3 below, it was only possible to use the data on sales, labour cost and employment. Thus it was not possible to use the data on expenses as recorded by the survey and, therefore, ratios for intermediate consumption and trade margins from other countries in the region were used. Output of trade services is defined as the margin, i.e. as the difference between sales and purchases of goods for resale. Output according to the survey is: repair services = 59.6; and trade margins = 1023.1.

The SBS is certainly underestimating trade services. Therefore, a total has been estimated on the basis of household consumption of goods (35% for most goods) and an estimated 10% of intermediate consumption of goods by all producers; the latter is of course a very rough estimate.

Transport and storage (ISIC H)

Production account	Values	Sources
Output	323.9	Berbera Port Authority
Intermediate consumption	185.5	SHS for output of public transport
Gross value added	138.4	
Contribution to GDP	1.5%	

The SBS included only three enterprises, so the results are not useful. The income statement from Berbera Port Authority provides data for port activities. Output of passenger transport is estimated on the basis of the SHS; expenditure is recorded for three categories: bicycle taxi, bus/minibus, and other (ox cart, truck). Output of freight services is a pure guess at 200 billion SLS. Intermediate consumption is estimated with ratios from Kenya's national accounts.

Accommodation and food service activities (ISIC I)

Production account	Values	Sources
Output	548.9	SBS
Intermediate consumption	289.9	SHS output of small scale operators (consumption of prepared food)
Gross value added	259.0	
Contribution to GDP	2.9%	

The SBS included 47 enterprises (representing 292) of which 11 (62) are hotels and 36 (230) restaurants and the like. Their shares of the estimated value added are 56% and 44% respectively. In particular restaurants are underestimated by the SBS as there are many small scale operators selling cooked food from stalls. An estimate of these is derived from the SHS as the household expenditure on prepared food and is added to the restaurant output according to the SBS. Besides, the output of hotels in the survey has been increased by 10%. Ratios of intermediate consumption over output are derived from the SBS.

Information and communication (ISIC J)

Production account	Values	Sources
Output	312.3	SBS
Intermediate consumption	110.7	
Gross value added	201.6	
Contribution to GDP	2.2%	

The SBS included 36 enterprises that comprise newspaper publishers (2), radio and TV (4), telecommunications (28) and computer consultancies (2). The two largest respondents in terms of employment – which may be Telesom and Somtel did not provide economic data and, therefore, were estimated on the basis of employment as described in Section 3. It would be important to check whether these respondents are indeed Telesom and Somtel and try to obtain their income statements for 2012.

Financial activities (ISIC K)

Production account	Values	Sources
Output	69.8	SBS
Intermediate consumption	40.5	Bank of Somaliland, income statement
Gross value added	29.3	
Contribution to GDP	0.3%	

There are two components making up the numbers: the Bank of Somaliland based (its income statement) and the results of the SBS. There are 21 respondents to the survey. Nine of these did not provide data on their sales, which were then estimated on the basis of employment. Dahabshil was included in the survey. The total sales according

to SBS were 54,329 million SLS. With a commission of 3% of the 20% that goes to the local agent, this would indicate total remittances of 1.4 million USD in 2012.

Real estate activities (ISIC L)

Production account	Values	Sources
Output	609.6	SBS: rental expenses
Intermediate consumption	38.0	SHS: number of dwellings & rental income
Gross value added	571.6	
Contribution to GDP	6.4%	

The classification of the five enterprises included in the SBS should be checked as it could be construction rather than real estate; the results based of the survey are not used for the estimate of GDP. On the other hand, the total expenditure on rent as calculated in the survey is used to estimate rentals of non-residential premises together with rental income for shops and stores as recorded in the SHS. The non-residential rentals are then estimated at 75 billion SLS; the ratio of intermediate consumption is set at 15%.

The estimate of dwelling rentals is based on the number of households by category of household and type of dwellings as shown in Table 2.6 below.

Table 2.6: Dwelling rentals

Type of household / dwelling	Rent (year) SLS billion		Monthly rent SLS thousand		Number of households	
	Rented	Own	Rented	Own	Rented	Own
House, rural	6.8	48.7	118	118	4 804	34 356
House, urban	223.9	205.1	357	179	52 196	95 625
Other types, rural	1.3	12.6	30	30	3 684	35 492
Other types, urban	2.9	10.0	30	30	8 181	28 206
Displaced		0.5		6		15 573
Nomadic		12.0		6		343 750
Total	234.9	288.9			68 865	553 001

The monthly rentals for houses are based on rental income as recorded in the SHS; the averages for urban houses are, however, scaled down as they appear very high. Other types of houses – tents, dormitories and others – are estimated at a quarter of rural rentals while displaced and nomadic households have been assigned an nominal monthly rental of about 6 000 SLS.

Professional and support services (ISIC MN)

Production account	Values	Sources
Output	185.0	SBS: expenses for machinery rental
Intermediate consumption	42.5	SHS: income from car and machinery rentals
Gross value added	142.5	
Contribution to GDP	1.6%	

There were only two respondents in the SBS stating their activity as advertising of renting of machinery respectively; not useful. On the other hand, the SBS provides data on expenditure of machinery rentals, in total 21.5 billion SLS. Besides, the SHS

provides data on income from car rentals. Combining these two sources, total rentals are estimated at 75 billion. Output of other types of services is a guess:

- 50 billion SLS for enterprises providing professional services such as accounting, auditing and engineering.
- 70 billion SLS for support services such as security, travel agencies and cleaning activities.

Public administration and defence (ISIC O)

Production account	Central	Local	Total	Sources
Output	390.0	49.7	439.7	Ministry of Finance
Intermediate consumption	105.0	33.2	138.2	Somaliland Road Authority
Gross value added	285.0	16.5	301.5	Income statement from the municipalities
Contribution to GDP	3.2%	0.2%	3.4%	

Central government excluding education and health has been defined as public administration and, likewise, all activities of the municipalities. This may not be entirely correct as especially the municipalities are engaged in activities that should not be classified in public administration. Central government also includes the Somaliland Road Authority. Output of government is defined as the sum of costs: intermediate consumption, compensation of employees and consumption of fixed capital. There is no data on the latter – a theoretically computed variable – so an approximate estimate has been inserted at 5% of staff costs.

Education (ISIC P)

Production account	Private	Public	Total	Sources
Output	300.4	45.9	346.3	Ministry of Finance
Intermediate consumption	105.1	2.6	107.7	SHS
Gross value added	195.3	43.3	238.6	
Contribution to GDP	2.2%	0.5%	2.7%	

Public education is calculated as recorded under government expenditure; these include teachers' salaries. Output is calculated as described for Public administration above. Private education is estimated on the basis of household expenses on education; 65% of this is assumed to be payment for services such as tuition fees. Intermediate consumption is estimated at 65% of output. Both ratios are derived from Kenya' national accounts.

The government accounts do not record any income under education. Fees paid to public schools are therefore included under private education. It is then assumed that expenses funded by the fees are not recorded under government expenditure.

Health and social work (ISIC Q)

Production account	Private	Public	Total	Sources
Output	175.5	18.5	194.0	Ministry of Finance
Intermediate consumption	61.4	4.3	65.7	SHS
Gross value added	114.1	14.2	128.3	
Contribution to GDP	1.2%	0.2%	1.4%	

Health is estimated in the same way as described for education. The ratio of services in the household expenditure on health is set at 60% and the ratio of intermediate consumption over output at 35%

Other services (ISIC RST)

Production account	Values	Sources
Output	46.3	SBS: hairdressers and ratio of intermediate
Intermediate consumption	9.3	consumption SHS: various services
Gross value added	37.0	
Contribution to GDP	0.4%	

There were six respondents in the SBS representing 87 enterprises; the majority of these were hairdressers. The SHS did not record any expenditure on hairdressing, so output of such services is based on the SBS. Output of other services is based on the SHS. These include recreation, battery charges; laundry and wages to domestic servants.

Finally, the SHS recorded 69.5 billion SLS as expenditure on funerals, weddings and other celebrations. It is assumed that 25% of this is payment for services while the rest should be expenditure on various goods, e.g. catering.

Taxes and subsidies on products

Taxes on products are mainly levied on imports with 12 different levies that vary—one way or the other – with the amount of imports. They include:

Import duty	Livestock levy	Fuel levy
Export duty	Administration tax	Development tax
Harbour tax	Permit fee	KDH
Sales tax	Stamp duty	Municipality tax

The revenue of the municipalities include an item “commodities tax” that appears to be a product tax. One product subsidy has been recorded as indicated under Electricity above; could be questionable.

2.2 GDP by Expenditure

The estimates in Table 2.7 are an illustration and must be used as such. The intention is to give an idea of a possible imports total compared to what is recorded by the Customs Department.

Table 2.7: GDP by expenditure

Description	SLS billion	% share
Final consumption expenditure by households	10 349.8	115.1
Final consumption expenditure by government	504.1	5.6
Gross fixed capital formation	900.0	10.0
Exports of goods and services	2 500.0	27.8
Minus: Imports of goods and services	5 498.5	58.5
GDP at market prices	8 991.0	100.0

Only the two consumption items are based on comprehensive data. The numbers are estimated as follows:

- *Household consumption* is calculated on the basis of the SHS-results. Details are provided in Table 2.8 below followed by a few comments.
- *Government consumption* is equal to total output of public administration plus output of government education and health. It may be slightly overestimated as revenue from sales and fees should be deducted; it has not been possible to identify such items.
- *Gross fixed capital formation*. The major part – say 95% or 680 billion – of construction output is GFCF. A tentative addition is made for machinery and transport equipment.
- *Exports* of livestock constitute the major part of exports, 2 165 million in 2012. The “rounding-up” to 2 500 is a guess.
- *Imports* are derived as a residual. The total recorded by Customs is 1 631.4 billion or 30% of the imports in Table 2.7, which also includes services.

Table 2.8: Final consumption expenditure by households

Main categories	Acquisitions	Own produce	Total	Per cent
Food and beverages	6 001.0	134.7	6 135.7	59.3%
Qat & cigarettes	515.9		515.9	5.0%
Clothing and footwear	440.1		440.1	4.3%
Housing	1 319.5	320.6	1 640.1	15.8%
Other goods (mainly durable)	88.3		88.3	0.9%
Education expenses	775.2		775.2	7.5%
Health care expenses	462.1		462.1	4.5%
Services n.e.s.	292.5		292.5	2.8%
Total	9 894.5	455.3	10 349.8	100.0%

With a few exceptions, the numbers in Table 2.8 are derived from expenditure data in the SHS; Section 4 below explains how the survey data have been raised and prepared for use in the national accounts. The exceptions – where other sources are used – are:

- The recorded imports including duties of qat and cigarettes are far above the expenditure according to the SHS; this kind of expenditure is normally underreported in household surveys.
- The SHS did not include any question on rental expenditure, which is calculated as described above.
- Expenditure on hairdressing was not included in the SHS and has been estimated on the basis of output derived from the SBS.

3 The Business Survey

The SBS included a sample of 504 enterprises of list of close to 3,100 enterprises. It included sections on employment, sales and costs – data that are useful for the GDP-estimates. The economic activities of the respondents were classified according to ISIC, rev.4 and according to legal status (share-holding company, sole proprietorship, partnership and limited partnership). Although virtually all respondents provided data on employment, many refused or were unable to provide data on sales and costs. Table 3.1 shows summary data on the respondents.

The table gives an indication of the non-response to the economic questions – it was quite high. The mission made imputations for missing data. They were based on assumptions of similarity between enterprises in the same industry as defined by the 4-digit ISIC-code. The results after these imputations are shown in Table 3.2. In brief the methods were as follows:

Table 3.1: Summary of the Somaliland Business Survey

Description	Number	Per cent
Number of enterprises	503	
Corporations ¹	198	39.4
Household enterprises ²	305	60.6
Did not provide data on labour cost	63	12.5
Did not provide data on sales	98	19.4

- The full time equivalent employment was calculated by dividing the number of part time employees by two and multiplying the number of temporary employees by months worked divided by 12.
- Missing data on labour costs were imputed by assuming the same average salary as for responding enterprises.
- Missing data on other costs (not labour) were imputed by assuming the same ratio to sales as for responding enterprises.
- It was not possible to use that method for other costs regarding wholesale and retail trade. Ratios from other African countries were used to estimate trade margins and intermediate consumption.
- A number of ad hoc adjustments were made where responses looked impossible.

Table 3.2: Results of the SBS as prepared for the GDP-estimates

Description	Output	Interm consum	Value added	Comp of employ	Employ- ment
Growing of crops	8.7	3.6	5.1	2.2	201
Livestock industry	23.8	10.8	13.1	4.6	448
Forestry	4.7	2.3	2.4	0.9	175
Fishing	15.8	5.57	10.24	2.60	565
Mining and quarrying	119.4	11.91	107.50	2.05	471
Manufacture of food excl meat processing	78.9	43.87	34.98	9.83	652
Manufacturing excl food and beverages	156.8	122.87	33.95	62.41	4 697
Electricity supply	7.8	6.5	1.3	1.1	0
Water supply; sewerage					
Construction	683.4	360.5	322.8	66.57	18 877
Wholesale & retail trade; repair of vehicles	1 044.0	448.9	595.1	140.18	14 167
Transportation and storage	6.0	5.1	0.9	0.9	92
Accommodation and food service activities	215.9	109.2	106.7	45.5	4 283
Information and communication	312.3	110.7	201.6	59.9	6 509
Financial and insurance activities	54.3	37.2	17.2	3.7	336
Real estate activities	28.2	24.0	4.2	8.2	497
Professional and support services	17.1	8.8	8.3	3.8	321
Other service activities	4.9	1.1	3.8	0.9	505

¹Institutional sector in the 2008 SNA; includes shareholding companies and limited partnerships.

²Institutional sector in the 2008 SNA; includes sole proprietorships and partnerships.

4 The Somaliland Household Survey

The weights used in SHS dataset could not be constructed on the basis of the population of Somaliland and its distribution; there were no reliable population data. Analytical weights were constructed for the survey allowing the derivation of representative statistics for rural and urban areas. Moreover, the survey was designed to cover settlements which exclude nomadic and displaced households although a few displaced (26) and nomadic (4) households were included. Notwithstanding, the design of the sample, national totals are needed for the estimates of GDP. Scaling factors were therefore calculated to adjust the weights based on available estimates of the population.

Somaliland in Figures (SIF) 2011 cites a population of 4.1 million in 2011; this is derived by an estimated annual population growth at 3.14% since 2006, when the UNDP estimated the population at 3.5 million with two thirds as rural or nomadic, while SIF cites 55% as nomadic and 45% as resident rural or urban. The displaced population is urban and amounts to about 85 000 according to a study in 2012³. The scaling of weights has been calculated as shown in Table 4.1; the population is set at 4 million.

Table 4.1: Population and scaling factors

Description	Raised survey numbers		Country totals			Totals / Survey	
	Households	Population	Households	Population	Per cent	Scaling1	Scaling2
Resident, rural	64 451	394 582	78 404	480 000	12%	1.22	6.77
Resident, urban	71 196	477 090	184 298	1 235 000	31%	2.59	2.59
Displaced	1 685	9 197	15 573	85 000	2%	9.24	9.24
Nomadic	241	1 544	343 750	2 200 000	55%	1 425.13	6.77
Total	137 573	882 412	622 024	4 000 000	100%	4.53	4.53

The four nomadic households in the survey are certainly not a statistically representative sample. Nevertheless, the expenditure pattern of nomadic households may differ from resident households and, therefore, separate scaling factors are calculated for resident rural and nomadic households (Scaling1). Scaling2 pools all rural households and is used to scale the weights for food and charcoal, while Scaling1 is used for all other expenditure items.

The survey data are raised to annual totals by multiplying weekly expenditure by 52, monthly by 12 and three-monthly by 4. A number of modifications have been made to the survey results.

- Unlikely values have been edited often by changing the unit from/to K (thousand SLS) and S (hundred SLS).
- Missing values have been calculated by applying the average of the responses with values.

³Participatory Assessments Report: The Lives of Internally Displaced People in Somaliland, November 2012

- There are no values for many own produced food items, only quantities. Values have then been calculated using the average unit price as derived from other responses.

Appendix 1 GDP by Activity 2012

Description	Output	Interm consum	Value added	Contri- bution	USD million
Growing of crops	921.9	184.4	737.5	8.2%	114.1
Livestock industry	3 561.3	910.8	2 650.5	29.5%	410.0
Forestry	609.7	145.7	464.0	5.2%	71.8
Fishing	17.8	2.7	15.2	0.2%	2.3
Mining and quarrying	134.4	13.4	121.0	1.3%	18.7
Manufacturing excl meat processing	624.2	452.6	171.6	1.9%	26.6
Electricity supply	446.7	371.8	74.9	0.8%	11.6
Water supply; sewerage; waste management	45.8	31.5	14.3	0.2%	2.2
Construction	716.0	382.3	333.7	3.7%	51.6
Wholesale & retail trade; repair of motor vehicles	3 083.2	1 325.8	1 757.4	19.5%	271.9
Transportation and storage	323.9	185.5	138.4	1.5%	21.4
Accommodation and food service activities	548.9	289.9	259.0	2.9%	40.1
Information and communication	312.3	110.7	201.6	2.2%	31.2
Financial and activities	69.8	40.5	29.3	0.3%	4.5
Real estate activities	609.6	38.0	571.6	6.4%	88.4
Professional and support services	185.0	42.5	142.5	1.6%	22.0
Public administration and defence	439.7	138.2	301.5	3.4%	46.6
Education	346.3	107.7	238.6	2.7%	36.9
Human health and social work activities	194.0	65.7	128.3	1.4%	19.8
Other service activities	50.8	11.0	39.8	0.4%	6.2
Sum of values added at basic prices	13 241.6	4 850.7	8 390.9	93.3%	1 298.1
Taxes and subsidies on products			600.2	6.7%	92.8
GDP at purchasers' prices			8 991.0	100.0%	1 390.9
GDP per capita, SLS thousand / USD			2 248		348